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ABSTRACT

Project Cuatro Casas was an Elementary and Secondary Education Act Title VII-funded project in its first year in 1993-94. The project operated at one high school in the Bronx (New York) and served 1,074 students of limited English proficiency. Participating students received instruction in English as a Second Language (ESL); native language arts; and the content area subjects of mathematics, science, and social studies. In-house staff development through on-site meetings, tuition assistance for teachers, and a parent involvement component were included. The bilingual students were organized into four houses (the "cuatro casas") to foster a sense of belonging and to ensure personal attention. Counseling for students and parents and intervention geared to attendance were important features. The project met its ESL objectives, a native language arts objective, attendance, staff development, and parent participation. It partially met its objectives for subject content, but did not meet advanced native language arts or peer tutoring objectives. Recommendations are made for better scheduling, peer tutoring, and more parent involvement. Six tables present evaluation findings, and two appendixes describe instructional materials and class schedules. (Author/SLD)

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OER Report

Project Cuatro Casas
Transitional Bilingual Education Grant T003D30242
FINAL EVALUATION REPORT
1993-94

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Project Cuatro Casas
Transitional Bilingual Education Grant T003D30242
FINAL EVALUATION REPORT
1993-94

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EXECUTIVE SUMMARY

Project Cuatro Casas was an Elementary and Secondary Education Act (E.S.E.A.) Title VII-funded project in its first year in 1993-94. The project functioned at William H. Taft High School in the Bronx and served 1,074 students of limited English proficiency (LEP). Participating students received instruction in English as a second language (E.S.L.); native language arts (N.L.A.); and the content area subjects of mathematics, science, and social studies.

Although in-house staff development was limited to faculty and departmental meetings, the project provided tuition assistance that enabled a large number of the teachers and paraprofessionals working with participating students to take university courses relevant to bilingual education.

The bilingual students were organized into four houses to foster a sense of belonging and ensure personal attention. Outstanding students received recognition and went on a variety of cultural trips. Students in difficulty (and their parents) were contacted and counseled by house coordinators, counselors, and family assistants in a systematic program of intervention keyed especially to attendance.

Project Cuatro Casas met its objectives for E.S.L., its N.L.A. objectives for gains on El Examen de Lectura en Español (ELE) and passing grades, attendance, staff development, and parental involvement. It partially met its objective for content area subjects. The project failed to meet its objectives for interventions, peer tutoring, or N.L.A. advanced placement, although its achievements in all three areas were substantial.

The conclusions, based on the findings of this evaluation, lead to the following recommendations:

- Seek ways to overcome scheduling problems so as to include students from the upper grades in the peer tutoring component.

- Encourage the parents' committee to assume more of an advisory role and increase membership.

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I. INTRODUCTION

In 1993-94, Project Cuatro Casas was in its first year of funding as an Elementary and Secondary Education Act (E.S.E.A.) Title VII project.

PROJECT CONTEXT

The project operated at William H. Taft High School in the Bronx. The population of the surrounding community—the Tremont section of the central Bronx—was roughly 60 percent Latino. The remaining population was primarily African-American, with a small number of Asian-Americans. The continuing influx of immigrants from the Dominican Republic has raised the Latino percentage appreciably in the past four years. The majority of the population were living near or below the poverty line.

The student population at William H. Taft High School was similar in distribution to that of the surrounding community. Of the 3,647 students who registered, 61 percent were Latino, 36 percent were African-American, and 2 percent were Asian-American; other ethnic groups accounted for about one percent of the student population. Thirty-one percent (1,147) of the students were of limited English proficiency (LEP). Thirty-nine percent (1,424) were eligible for the federally-funded free-lunch program, an index of poverty. These figures were compiled in 1992-93, the most recent year for which data were available.

William H. Taft High School was housed in a building that was constructed in 1941. An Office of Educational Research (OER) consultant visited the school and observed halls and classrooms that were clean and in reasonably good repair.

Bulletin boards carried displays on such topics as the achievements of women in United States history. Several displays, however, were unchanged between the consultant's two visits, which occurred almost three months apart. The school had ten computer labs, which were regularly used for computer-assisted instruction (C.A.I.). Rising enrollment led the school to institute two sessions in order to reduce crowding: students in grades ten through twelve attended from the first to the sixth periods, while ninth grade students attended from the seventh to the twelfth periods. All lunch periods were eliminated. Staff reported that this arrangement facilitated the maintenance of discipline. Nevertheless, in two of the four classes which an OER consultant observed, the teacher had to call for security guards. In one case, it was to break up a fight inside the classroom; in the other, it was to quiet a group of students who were making noise in the hall.

STUDENT CHARACTERISTICS

Project Cuatro Casas served 1,074 Spanish-speaking LEP students in ninth through twelfth grade. Scores at or below the 40th percentile on the Language Assessment Battery (LAB) determined LEP status. The project served 450 students in ninth grade, 283 students in tenth grade, 169 students in eleventh grade, and 172 students in twelfth grade.

In 1993-94, the number of male and female students served by Project Cuatro Casas was approximately equal (533 male, 538 female, and 3 unreported). All students had Spanish as their home or native language. Two-thirds of participants for whom country of birth was known were born in the Dominican Republic.

Needs Assessment

Before instituting the project, William H. Taft High School conducted a needs assessment of the targeted students and their families as well as of the educational staff who were to serve them.. The data obtained from these studies indicated two primary needs: (1) to ensure that the growing numbers of immigrant LEP students did not get lost in the crowd but would receive individual attention and encouragement as needed to facilitate their academic progress and acquisition of language skills; and (2) to assist the large number of relatively new teachers with resources and training in the area of bilingual education.

PROJECT OBJECTIVES

Student Objectives

- As a result of participating in the program, English as a second language (E.S.L.) students will make statistically significant gains in English language proficiency.
- As a result of participating in the program, students will show significant gains in native language achievement.
- In each semester, at least 70 percent of all project students enrolled in Spanish native language arts (N.L.A.) courses will achieve a passing grade.
- As a result of participating in the program, at least 20 students each year will take the Advanced Placement Examination in Spanish and receive college credits.
- For each of the content area subjects (bilingual mathematics, bilingual science, and bilingual social studies), at least 70 percent of the students enrolled in each subject will score at or above the 65 percent passing criterion. This objective will be evaluated separately for each semester, counting only those students who attend at least 70 percent of the days in the semester.

- As a result of the increased contact that will occur by dividing the LEP population into four separate "houses," interventions will be made for attendance, achievement and/or conduct (both positive and negative) for at least 90 percent of participating students.

- The program will offer after-school tutoring in E.S.L., N.L.A., bilingual mathematics, bilingual science, and bilingual social studies. At least five tutors and twenty tutees will participate each year.

- As a result of participating in the program, students' attendance will be significantly higher than that of the mainstream students.

Staff Development Objectives

- Five program staff members will enroll in at least one university course each semester.

Parental Involvement Objectives

- As a result of the increased communication and interest generated by the small, more intimate "houses" being created by the project, the proportion of program students' parents who participate in Open School Day/Evening will be equal to or greater than the proportion of mainstream students' parents who participate in the same activity.

PROJECT IMPLEMENTATION

During the 1993-94 school year, Project Cuatro Casas provided instructional and support services to 1,074 Spanish-speaking students and their families. All content area courses, except for a few advanced science courses, were taught in Spanish. Project staff set up a peer-tutoring program for ninth grade students. Coordinators and counselors in each of the four "houses" monitored scholarship and attendance, intervening as appropriate. Honor roll students went on several cultural trips. The project reimbursed staff for university courses taken, and a resource specialist assisted teachers with the selection and use of instructional materials. The

project also organized a parent committee, although it did not meet as frequently as proposed.

Materials, Methods, and Techniques

Project Cuatro Casas offered E.S.L. at literacy, beginning, intermediate, advanced, and transitional levels, and Spanish N.L.A. at the literacy to advanced placement levels.

Teachers of participating students used a variety of audiovisual aids and C.A.I. When paraprofessionals were available, they provided individualized assistance in the classroom. At the literacy level, team-teaching by E.S.L. and N.L.A. instructors was standard procedure. E.S.L. teachers used skits and role-playing to increase interest.

For a list of instructional materials used in the project, please see Appendix A.

Capacity Building

William H. Taft High School plans to assume costs as federal funding decreases. The family assistant, who was 50 percent supported by Title VII funds in the year under review, will be completely supported by tax-levy monies in the following year.

Staff Qualifications

Title VII Staff. The project director, a house coordinator, and a family assistant were funded by Title VII. For a description of their degrees and language proficiency (teaching or communicative*), see Table 1.

TABLE 1

Project Staff Qualifications

Position Title	Degree(s)	Language Proficiency
Project Director	M.A., P.D.	Spanish TP
House Coordinator	B.A.	Spanish TP
Family Assistant	High School Diploma	Spanish NS

The project director's responsibilities included supervising and coordinating activities, selecting and training staff, and providing evaluation data. He had more than 20 years' experience teaching LEP students.

The house coordinator monitored the grades and attendance of project students in his house, intervened with parents and other staff when necessary, and helped resolve academic and disciplinary problems as they arose.

The family assistant made home visits and contacted parents by telephone when their children's attendance lagged or they appeared to be in difficulty at school.

*Teaching proficiency (TP) is defined as the ability to use LEP students' native language in teaching language arts or other academic subjects. Communicative proficiency (CP) is defined as a non-native speaker's basic ability to communicate and interact with students in their native language. NS indicates native speakers of Spanish.

Other staff. Tax-levy and Chapter 1 funds paid the salaries of the 54 teachers and six educational assistants who provided instructional services to project students. In addition, a bilingual aide devoted part of her workweek to the project's paperwork and telephone contacts; two family assistants helped maintain communication with parents; three bilingual counselors provided guidance services; a resource specialist helped select instructional materials and train staff in their use; and an assistant principal provided overall supervision of the school's E.S.L./foreign language program. For degrees, certifications, and language proficiency, please see Table 2.

All but three of the teachers had training in either bilingual education or E.S.L. and held high school certification in the subject area they taught. The three others had provisional licenses, one of which was outside the teacher's subject area.

TABLE 2

Qualifications of Non-Title VII Staff

Position Title	Degrees	Certification	Language Proficiency
1 Asst. Principal	M.A.	Administration	Spanish TP
54 Teachers	Ph.D. 2 M.A./M.S. 21 M.Ed. 1 B.A./B.S. 30	E.S.L. 17 English 1 Spanish 10 Bil Soc Stud 10 Bil Math 8 Bil Science 5 Temporary/ Provisional 3	Spanish 42 TP 6 CP
1 Resource Specialist	M.A.	E.S.L.	Spanish CP
6 Ed. Assistants	B.A. 1 High School 5	N.Y.C. Paraprof'l 6	Spanish 6 NS
2 Family Assistants	High School 2	N.Y.C. Paraprof'l 2	Spanish 2 NS
3 Counselors	M.S. 2 B.S. 1	Bil Guidance 3	Spanish 3 TP
1 Bilingual Aide	High School	N.Y.C. Paraprof'l	Spanish NS

Staff Development

In the fall semester, 15 staff members (teachers, educational assistants, or family assistants) received tuition assistance toward college or university courses relevant to bilingual education. In the spring, 18 staff members received such assistance.

Instructional Time Spent on Particular Tasks

See Appendix B for examples of typical class schedules.

Length of Time Participants Received Instruction

These data will be included in the Final Evaluation Report.

Activities to Improve Pre-referral Evaluation Procedures for Exceptional Children

Teachers referred those students thought to be in need of special education services to the School-Based Support Team (S.B.S.T.) for evaluation. Of the three clinicians who constituted the S.B.S.T. at William H. Taft High School, the psychologist was fluent in Spanish.

2few Gifted and talented students were identified by teacher judgment and course grades.

Instructional Services for Students with Special Needs

Tight scheduling at the high school made it possible to offer peer tutoring only to ninth graders. Outstanding students at that grade level were encouraged to become tutors.

The project planned to begin block-programming some courses for honor students in its second year.

PARENT AND COMMUNITY INVOLVEMENT ACTIVITIES

The project conducted an E.S.L. class for parents, recruited parents for an advisory committee, and invited parents to accompany their children on cultural field trips.

II. EVALUATION METHODOLOGY

EVALUATION DESIGN

Project Group's Educational Progress as Compared to That of an Appropriate Non-Project Group

The Office of Educational Research (OER) used a gap reduction design to evaluate the effect of language instruction on project students' performance on standardized tests. Because of the difficulty in finding a valid comparison group, OER used instead the groups on which the tests were normed. Test scores are reported in Normal Curve Equivalents (N.C.E.s), which are normalized standard scores with a mean of 50 and a standard deviation of 21.1. It is assumed that the norm group has a zero gain in N.C.E.s in the absence of supplementary instruction and that participating students' gains are attributable to project services.

Applicability of Conclusions to All Persons Served by Project

Data were collected from all participating students for whom there were pre- and posttest scores. (There were no pretest data on students who entered the program late; therefore, posttest data for them will serve as pretest data for the following year.) Instruments used to measure educational progress were appropriate for the students involved. The Language Assessment Battery (LAB) and El Examen de Lectura en Español (ELE) are used throughout New York City to assess the growth of English and Spanish skills in populations similar to those served by Project Cuatro Casas.

INSTRUMENTS OF MEASUREMENT

OER compared pre- and posttest scores on the LAB to assess the E.S.L. objective and the ELE to assess the N.L.A. objective. The content area objective in mathematics, science, and social studies was assessed through course grades, as specified.

All students were tested at the appropriate grade level. The language of the LAB and ELE was determined by the test itself.

According to the publishers' test manuals, all standardized tests used to gauge project students' progress are valid and reliable. Evidence supporting both content and construct validity is available for the LAB. Content validity is confirmed by an item-objective match and includes grade-by-grade item difficulties, correlations between subtests, and the relationship between the performance of students who are native speakers of English and students who are LEP. To support reliability, the Kuder-Richardson Formula 20 (KR20) coefficients and standard errors of measurement (SEM) are reported by grade and by form for each subtest and total test. Grade reliability coefficients, based on the performance of LEP students on the English version, ranged from .88 to .96 for individual subtests and from .95 to .98 for the total test.

The ELE was prepared by New York City educators who were native speakers of Spanish and represented several Latino linguistic and cultural groups. The ELE was administered in two forms to all New York City students who were receiving language arts instruction in Spanish. For both forms, the grade reliability coefficients

ranged from .94 to .96. Items on the test were grade-specific. Construct validity is evidenced by grade-to-grade decreases in item difficulty within level. This characteristic reflects the acquisition of increased amounts of the underlying construct (reading proficiency) as students progress through the grades.

To assess the objective for interventions to be made as a result of increased contact through the organization of students into four houses, an OER consultant selected a stratified random sample of students and examined the notations on the back of each student's card in the official Pupil Record of Attendance.

To assess the objective for parental attendance at Open School Day/Evening, school and project staff kept records of attendance in both semesters and reported the totals to OER.

DATA COLLECTION AND ANALYSIS

Data Collection

To gather qualitative data, an OER evaluation consultant carried out on-site and telephone interviews with the project director several times during the school year and also observed two classes and a tutoring session on each of two visits. The project evaluator collected the data and prepared the final evaluation report in accordance with the New York State E.S.E.A. Title VII Bilingual Education Final Evaluation Report format, which was adapted from a checklist developed by the staff of the Evaluation Assistance Center (EAC) East in consultation with the Office of Bilingual Education and Minority Language Affairs (OBEMLA).

Proper Administration of Instruments

Qualified personnel received training in testing procedures and administered the tests. Test administrators followed guidelines set forth in the manuals accompanying standardized tests. Time limits for subtests were adhered to; directions were given exactly as presented in the manual.

Testing at Twelve-Month Intervals

Standardized tests were given at 12-month intervals, following published norming dates.

Data Analysis

Accurate scoring and transcription of results. Scoring, score conversions, and data processing were accomplished electronically by the Scan Center of the Board of Education of the City of New York. Data provided by the Scan Center were analyzed in the Bilingual, Multicultural, and Early Childhood Evaluation Unit of OER. Data collectors, processors, and analysts were unbiased and had no vested interest in the success of the project.

Use of analyses and reporting procedures appropriate for obtained data. To assess the significance of students' achievement in English and Spanish, OER computed a correlated *t*-test on the LAB and ELE N.C.E. scores. The *t*-test determined whether the difference between the pre- and posttest scores was significantly greater than would be expected from chance variation alone.

The only possible threat to the validity of any of the above instruments might be that LAB norms were based on the performance of English Proficient (EP) rather

than LEP students. Since OER was examining gains, however, this threat was inconsequential—the choice of norming groups should not affect the existence of gains.

III. FINDINGS

PARTICIPANTS' EDUCATIONAL PROGRESS

Project Cuatro Casas carried out all instructional activities specified in its design.

Participants' Progress in English

Throughout the school year, students had ample opportunity to develop their English language skills. E.S.L. was offered at the literacy, beginning, intermediate, advanced, and transitional levels. Students at the beginning level received 15 periods of instruction weekly; all other levels received ten periods.

The OER consultant observed two E.S.L. classes. One was a level 2 (beginning) class of mostly tenth graders. Of the 17 students who were on the roster, five were absent, three of whom were long-term absentees (L.T.A.s). The participating students were organized into groups of two or three and given mimeographed sheets of questions. These were discussed cooperatively before students wrote their answers. The teacher and the educational assistant, who were native speakers of Spanish, moved from group to group answering questions, eliciting ideas and phrases, and slowly and distinctly pronouncing longer words such as *understanding*. The instructors used grammatical terms like "third person singular" but their emphasis lay on giving examples, paraphrasing, and modeling the use of words and phrases. They encouraged the students to speak English and addressed them for the most part in English, but the observer noticed that most of the discussion among the students in their small groups was in Spanish. Near the

end of the class, the teacher asked for volunteers to read the paragraphs they had composed to describe a person. One student read an encomium of "Mr. Bill Clinton" as "the most handsome president in the world." Another student read, "Blanca is a person very stupid. She is an aye-diot." The teacher corrected her pronunciation of *idiot* but not her placement of attributive adjectives. The class appeared to be an effective one.

The consultant also observed an advanced (level 5) E.S.L. class in which 12 students were present, five were absent, and two were L.T.A.s. Working from the book ***Developing Reading Skills***, the teacher led the class through a review of the section describing U.S. cities. As she spoke, she frequently paused to elucidate a phrase or a word: "What have we been reviewing? Do you hear that: present perfect, continuance; you will have grammar questions on the exam. . ." She politely but firmly encouraged the students to speak English in the class, while making reference to Spanish in order to clarify English words (*ensayo* to introduce *essay*, for example). The atmosphere was relaxed but highly focused. The students took turns reading aloud a passage which described the perils of nineteenth-century cities, such as runaway horses and unsanitary conditions. Occasionally the teacher called for the class to repeat a phrase in unison in order to master the pronunciation. After finishing the review and assigning homework, she began dispensing props for a rehearsal of a skit which the class was going to perform the following day. The students read their parts with gusto, and the teacher made only one correction during the rehearsal.

The project proposed one objective for E.S.L.:

- As a result of participating in the program, E.S.L. students will make statistically significant gains in English language proficiency.

There were complete pre- and posttest scores on the LAB for 569 students from grades nine through twelve. (See Table 3.) The average gain of 3.2 N.C.E.s (s.d.=9.3) was statistically significant ($p<.05$).

Project Cuatro Casas met its objective for E.S.L.

Participants' Progress in Native Language Arts

N.L.A. was offered five periods a week at all levels.

The OER consultant observed an advanced (level 7) Spanish N.L.A. class with 24 students present. The class was devoted to reading a short story by J.J. Arreola, *El Guardagujas*. As one student began reading aloud, the teacher circulated around the room and personally asked each student to open his or her book and read along. A student wrote some vocabulary words on the chalkboard, most of them pertaining to railroads and travel. The teacher asked students to recount difficulties they had experienced while traveling; one student told a humorous anecdote about a mishap which had befallen him in Santo Domingo. To finish the work of a previous lesson, one student read aloud a book report she had prepared.

TABLE 3

Pretest/Posttest N.C.E. Differences on the
Language Assessment Battery (LAB), by Grade

Grade	Total number of project students	Number of students for whom data were available	Pretest		Posttest		Difference		*t* value
			Mean	S.D.	Mean	S.D.	Mean	S.D	
9	450	219	4.1	7.5	6.4	8.5	2.3	6.5	5.15*
10	283	159	8.8	12.6	12.9	14.3	4.1	11.4	4.47*
11	169	99	7.7	10.4	12.4	12.1	4.7	9.2	5.07*
12	172	92	13.8	12.2	16.0	15.1	2.2	1.1	1.93
Total	1,074	569	7.6	10.9	10.8	12.7	3.2	9.3	8.10*

*$p<.05$

- Overall and at three grade levels, participating students showed significant gains on the LAB.

The project posed the following objectives for N.L.A.:

- As a result of participating in the program, students will show significant gains in native language achievement.

There were complete pre- and posttest scores on the ELE for 167 students. (See Table 4.) Their average gain of 7.8 N.C.E.s (s.d.=14.6) was significant ($p<.05$).

Project Cuatro Casas met its N.L.A. objective for gains on the ELE.

- In each semester, at least 70 percent of all project students enrolled in Spanish N.L.A. courses will achieve a passing grade.

In the fall semester, 78.0 percent of the 632 students enrolled in N.L.A. received passing grades. (See Table 5.) In the spring semester, 72.7 percent of the 572 students enrolled in N.L.A. passed.

The project met its N.L.A. objective for passing grades.

- As a result of participating in the program, at least 20 students each year will take the Advanced Placement Examination in Spanish and receive college credits.

In spring 1994, 16 project students took the advanced placement examination in Spanish. This was fewer than the proposed 20.

The project did not meet its N.L.A. advanced placement objective.

TABLE 4

Pretest/Posttest N.C.E. Differences on
El Examen de Lectura en Español (ELE), by Grade

Grade	Total number of project students	Number of students for whom data were available	Pretest		Posttest		Difference		*t* value
			Mean	S.D.	Mean	S.D.	Mean	S.D.	
9	450	96	43.1	19.8	52.2	18.6	9.1	14.2	6.28*
10	283	70	53.7	17.3	59.6	18.4	6.0	15.0	3.31*
11	169	1	65.0	--	81.0	--	16.0	--	--
12	172	0	--	--	--	--	--	--	--
Total	1,074	167	47.7	19.4	55.5	18.8	7.8	14.6	6.94*

*$p<.05$

- Overall, and at both grade levels at which there were students taking the ELE, gains were significant.

TABLE 5

Passing Grades in Native Language Arts and
Content Area Courses, by Subject

Subject	Fall		Spring	
	Number Enrolled	Percent Passing	Number Enrolled	Percent Passing
Native Language Arts	632	78.0	572	72.7
Mathematics	737	57.1	632	63.3
Science	290	87.6	327	86.2
Social Studies	730	80.0	7034	86.3

LEP Participants' Academic Achievement

Except for one or two advanced science courses in which few project students enrolled, all content area courses were taught in Spanish.

The OER consultant observed a Regents biology class which took place in a laboratory with eight students present. The desks and the tops of the experimental tables had been covered with graffiti. On the wall, surrounded by anatomical diagrams and photographs of animals, a placard read:

> *Attention:
> Do not take away the faucet
> or destroy the drawers
> Please keep your classroom in good
> conditions.

The teacher began by reviewing a multiple choice homework assignment about chromosomes. The questions covered topics ranging from Down's syndrome to the dangers of L.S.D. The homework was in English; the teacher talked about it in both Spanish and English. The students' discussion, mostly in Spanish, became increasingly lively, and the teacher artfully guided them to consider the background to particular problems and to relate new concepts to familiar material. After completing the homework review, the teacher handed out mimeographed sheets summarizing the day's lesson, which was on the building blocks of DNA. She described the structure and composition of DNA, at one point using the analogy of *arroz con habichuelas* to explain how certain nitrogen bases combine naturally with each other. Then she assigned homework and in the last minute of class conducted a quick review of the day's lesson, asking students to define some of the new terms without looking at their notes.

Project Cuatro Casa proposed the following objective for content area subjects:

- For each of the content area subjects (Bilingual Mathematics, Bilingual Science, and Bilingual Social Studies), at least 70 percent of the students of the students enrolled in each subject will score at or above the 65 percent passing criterion. This objective will be evaluated separately for each semester, counting only those students who attend at least 70 percent of the days in the semester.

In all subject areas but mathematics, more than 70 percent of participating students passed each semester. (See Table 5.)

The project partially met its objective for content area subjects.

FORMER PARTICIPANTS' PROGRESS IN ENGLISH LANGUAGE CLASSROOMS

As this was the project's first year, there were no former participants whose progress could be reported.

OVERALL EDUCATIONAL PROGRESS ACHIEVED THROUGH PROJECT

Mainstreaming

No objectives were posed for mainstreaming. The number of students mainstreamed during the year under review is not known.

Interventions

- As a result of the increased contact that will occur by dividing the LEP population into four separate "houses," interventions will be made for attendance, achievement, and/or conduct (both positive and negative) for at least 90 percent of participating students.

Near the end of the school year, an OER consultant chose eight official classes for a stratified random sample (two classes from each grade level, and two from each house) and examined the Pupil Record of Attendance for each of the 199 students who were enrolled in the official classes thus selected. Interventions noted in these records included letters, home visits, and telephone calls by staff to the families of students who appeared to be having difficulties of one kind or another. Letters and awards for good attendance were also included. The number of interventions recorded ranged from zero to 18. One hundred sixty-seven (84 percent) of the students in the sample had received at least one intervention. The amount by which this proportion fell short of the target rate was statistically significant ($p<.05$, $z=-2.82$).

The project did not meet its objective for interventions, although it came close.

Peer Tutoring

- The program will offer after-school tutoring in E.S.L., native language arts, bilingual mathematics, bilingual science, and bilingual social studies. At least five tutors and twenty tutees will participate each year.

Project Cuatro Casas instituted peer tutoring for ninth graders in the period preceding the start of their session, which was in the afternoon. Staff intended to explore ways of extending the program to the higher grades in subsequent years.

The OER consultant observed the peer tutoring program twice—once in March 1994, shortly after it was established, and again three months later. A classroom was reserved for tutoring four days a week. The project director supervised the tutoring and worked with some students himself. The first time the consultant visited, he observed two students enjoying the attention of five tutors as well as the project director! On his second visit, the consultant found four tutors and five students working diligently in small groups on E.S.L., N.L.A., and social studies. The project director reported that these particular tutors worked four days a week, and 17 students received tutoring on a regular basis. That these numbers fell short of the targets could be attributed to the program's late start. It seemed likely that the peer tutoring effort would grow to meet or exceed projections in the following year.

The project did not meet its objective for peer tutoring, although it successfully introduced this component.

Cultural Trips

As an incentive for good grades and attendance, Project Cuatro Casas organized a number of trips to sites of cultural interest. In the spring, the project

took 42 honor students and two parents on a three-day tour of Baltimore and Philadelphia. In other expeditions, a busload of transitional-level E.S.L. students visited the state park at Bear Mountain; 45 honor roll students visited the Liberty Science Center in New Jersey; and 27 intermediate E.S.L. students visited the Statue of Liberty and the Ellis Island National Monument to gain background experience while studying the text *Passport to America*.

Grade Retention

Project Cuatro Casas did not propose any objectives for reducing grade retention. The project did not indicate the number of participating students whom staff expected to be retained in grade.

Dropout Prevention

Project Cuatro Casas did not propose any objectives for dropout prevention, although the house organization and policy of frequent interventions were naturally expected to have an impact in this area. The project did not indicate the number of participating students who dropped out of school during the year under review.

Attendance

Project Cuatro Casas proposed the following attendance objective:

- As a result of participating in the program, students' attendance will be significantly higher than that of the mainstream students.

Attendance of participating students was 82.7 percent. This compares with a schoolwide rate of 80.7 percent. The attendance rate of project participants was significantly higher than that of mainstream students.

Project Cuatro Casas met its objective for attendance.

Placement in Gifted and Talented Programs

In the year under review, the project director selected 33 ninth-grade project students to be block-programmed for the following year into a program that would probably include honors history and Regents biology courses as well as accelerated classes in E.S.L. and Spanish.

Enrollment in Postsecondary Education Institutions

To encourage students to consider continuing their education, the project took selected tenth and eleventh graders on tours of Lehman College and Sullivan County Community College.

It is not known how many graduating seniors planned to enroll in postsecondary education institutions.

CASE HISTORY

G. came to the United States from El Salvador in September of 1993. She enrolled in Taft High School and had the typical bilingual program for a newcomer: three classes of E.S.L., one class of Spanish, bilingual mathematics, bilingual science, and bilingual social studies. Her average was 87.7 in June of 1994.

G. became a prime candidate for the new "honor" class that Taft High School created in September. That class had a block program for two E.S.L. classes, Spanish, bilingual science, and bilingual mathematics.

A composition G. recently wrote illustrates her progress in English.

Some people around the world are alone in the streets in many places. They don't have food, houses, or special love. They're dirty on the sidewalk and when you go walking on the sidewalk, they beg for a quarter or simply say to you "help me" but who will really help these people?

Last month, two people came to the school to our classroom. One of them was Mr. Brown, a social worker of the Beacon of Hope House. He said that sometimes this problem comes from the family or they have economic problems.

Some of them like to use and sell drugs and alcohol. For example, Mr. Simon came to our class and he told us about his former life. He was a homeless man and he did the same things that the other homeless people did. He used and sold drugs....

The homeless that are on the streets can imitate Mr. Simon. He was so down and he said, "I can do it." He picked himself up and now he has a job. He also has family and a better future for himself and his family.

Sincerely, he is a great example for all people and especially for the homeless. He is worthy of admiration.

STAFF DEVELOPMENT OUTCOMES

The project proposed the following staff development objective:

- Five program staff members will enroll in at least one university course each semester.

With tuition assistance from the project, 15 school staff members who worked with project students (as teachers, paraprofessionals, or family assistants) took university courses in the fall. In the spring, 18 staff members took university courses and received assistance in paying tuition costs.

The project met its staff development objective.

PARENTAL INVOLVEMENT OUTCOMES

In the narrative of its grant proposal, Project Cuatro Casas looked forward to a Parent Advisory Committee (PAC) that would hold four meetings during the school year. The project did establish a PAC, although in actuality it functioned more to

provide its members with information than to seek their advice. The PAC met three times during the school year, with attendance ranging between eight and ten parents.

Two parents accompanied the students on their cultural tour of Baltimore and Philadelphia. The resource specialist taught a beginning E.S.L. class that met three times a week, with 17 parents participating regularly.

Project Cuatro Casas posed the following objective for parental involvement:

- As a result of the increased communication and interest generated by the small, more intimate "houses" being created by the project, the proportion of program students' parents who participate in Open School Day/Evening will be equal to or greater than the proportion of mainstream students' parents who participate in the same activity.

The project parents' attendance rate was more than double the rate for mainstream parents each semester. The numbers attending were sufficiently large to render superfluous a test for statistical significance in the difference between the proportions. (See Table 6.)

The project met its objective for parental involvement.

TABLE 6

Attendance of Parents at Open School Day/Evening

Parents	Fall		Spring	
	Number Attending	Percent Attending	Number Attending	Percent Attending
Participating students	225	23	200	20
Mainstream students	275	10	200	7

IV. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

ACHIEVEMENT OF OBJECTIVES

Project Cuatro Casas met its objectives for E.S.L., its N.L.A. objectives for gains on El Examen de Lectura en Español (ELE) and passing grades, attendance, staff development, and parental involvement. It partially met its objective for content area subjects. The project failed to meet its objectives for interventions, peer tutoring, or N.L.A. advanced placement, although its achievements in all three areas were substantial. That it fell slightly short of targets in these areas does not seem reason for concern, as this was a start-up year for a project that served an unusually large number of students.

A number of cultural trips, particularly the ambitious visits to Baltimore and Philadelphia by honor students, provided enriching experiences for students.

A large number of staff members took university courses with tuition assistance from the project. A resource specialist assisted less experienced teachers in the selection and use of bilingual education materials.

Although parents' attendance at school functions was better than that shown by parents of mainstream students, the bilingual parents' committee did not assume the advisory role that the project had envisioned. A small group of parents regularly attended the project's adult E.S.L. class, however.

MOST AND LEAST EFFECTIVE COMPONENTS

Highly effective components of Project Cuatro Casas were the peer tutoring program, which, however, needed to be extended to include students in the upper

grades, and the close monitoring and encouragement which project staff provided to most students.

Observations during this first year suggested that the project implemented all service components effectively, although several components did not reach the proposed scale of operation.

RECOMMENDATIONS TO ENHANCE PROJECT EFFECTIVENESS

- Seek ways to overcome scheduling problems so as to include students from the upper grades in the peer tutoring component.
- Encourage the parents' committee to assume more of an advisory role and increase membership.

APPENDIX A

Instructional Materials

E.S.L.

Level	Title	Author	Publisher	Date of Publication
1-2	Side by Side 1-2	Molinsky & Bliss	Prentice-Hall	1987
3	Write from the Start	Davidson & Blot	Newbury House	1984
3	Passport to America	Norman Hitch	Voluntad	1987
4	Composition Practice	Linda Blanton	Newbury House	1987
4–6	Developing Reading Skills	Linda Markstein	Newbury House	1987
4–5	Expressions/Viewpoints	Pat Fiene	Contemporary Books	1992
5	American Topics	Robert Lugton	Prentice-Hall	1986
5	The Pearl	John Steinbeck	Signet	1986
5	West Side Story	Irving Shulman	Simon & Schuster	1967
6	At the Door	Petitt McKay	Prentice-Hall	1984
6	Myths and Folktales Around the World	Robert Potter	Globe	1992
6	The Miracle Worker	William Gibson	Bantam Books	1960
6	The Outsiders	S.E. Hinton	Laurel Leaf	1967
6	Lilies of the Field	William Barrett	Warner	1962
6	The Old Man and the Sea	E. Hemingway	Macmillan	1987
7–8	A Raisin in the Sun	L. Hansberry	Signet	1988
7–8	El Bronx Remembered	Nicholasa Mohr	Harper Keypoint	1975
7–8	The Little Prince	Ste.-Exupéry	Harcourt Brace	1943
7–8	The Bridge of San Luis Rey	Thornton Wilder	Harper and Row	1927
7–8	Black Boy	Richard Wright	Harper Collins	1944
7–8	A Tree Grows in Brooklyn	Betty Smith	Harper Collins	1947
1–4	English for a Changing World	Banks, *et al.*	Scott, Foresman	1984
5	Gallery	Fassmann & Tavares	Oxford	1982
5–6	Ready to Write	Blanchard & Root	Longman	1984

APPENDIX A

Instructional Materials, cont'd.

N.L.A.

Grade	Title	Author	Publisher	Date of Publication
9	Ortografía	Perera	Minerva	1977
9	Lenguaje 4, 5	Alvarez	Ediciones S.M.	1990
9	Antología comunicativa	Arevalo	Editorial Norma	1987
9	La perla negra	Scott O'Dell	Editorial Norma	1986
9 & 10	Leyendas Latinoamericanas	Barlow	National Textbook	*

Mathematics

Grade	Title	Author	Publisher	Date of Publication
9	Repaso matematico	Edwin Stein	Allyn & Bacon	1971
9	Preliminary Mathematics	Dressler	Amsco	1962
9–10	Integrated Mathematics	Dressler & Keenan	Amsco	1989
9	Regents Competency Mathematics	Allasio & Dalpan	West Sea	1986
9	Mathematics *Cuaderno & Text*	*	Silver Burdett & Ginn	1989
10–11	Pre-Algebra	Lowny & Ochenga	Heath	1992

* Information not provided.

APPENDIX A

Instructional Materials, cont'd.

Science

Grade	Title	Author	Publisher	Date of Publication
9	La materia y la energía	Heimler & Price	Merrill	1985
10-11	Biology and Human Progress	Tanzer	Prentice-Hall	1986
10–11	Biología	Alexander	Silver Burdett & Ginn	1984

Social Studies

Grade	Title	Author	Publisher	Date of Publication
9–10	Comprende tu mundo: su historia, sus culturas	Killoran, Jarrett, & Zimmer	Jarrett	1991
9–10	El mundo y su gente: Europa, Africa, Asia, y Australia	Cooper, Arnsdorf, & Toppin	Silver Burdett & Ginn	1984
9–10	China	Rosenfeld & Geller	Barron's Educational Series	1976
11	El mundo y su gente: los Estados Unidos y sus vecinos	Helmus, Arnsdorf, & Toppin	Silver Burdett & Ginn	1984
11–12	Nueva historia de los Estados Unidos	Baker, Hall, Linden, Pagan	Minerva	1991
12	Los Estados Unidos: su historia, su gobierno	Killoran, Jarrett, & Zimmer	Jarrett	1992

APPENDIX B

Class Schedules

Students at each grade level had a school day of six 40–minute periods. Below are some typical schedules. Where two courses are listed together, the student took the first in the fall and the second in the spring.

Grade 9

E.S.L. 1–2
E.S.L. 1–2
E.S.L. Skills
Global Studies 1–2
Fundamentals of Mathematics 1–2
Spanish 2–3

Grade 10

E.S.L. 3–4
E.S.L. Skills 3–4
Physical Education
Global Studies 3–4
Pre-Sequential Mathematics
General Science 1–2

Grade 11

E.S.L. 5–6
E.S.L. Skills 5–6
U.S. History 1–2
Sequential Mathematics A–B
Human Biology 1–2
Physical Education

Grade 12

E.S.L. 7–8
E.S.L. Skills 7–8
Government – Economics
Sequential Mathematics C
Chemistry 1–2
Music – Art